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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,169	02/27/2006	Markus Hame	60,469-255;5304	8609

64779 7590 03/22/2007  
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BIRMINGHAM, MI 48009

EXAMINER
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SINGH, KAVEL

ART UNIT	PAPER NUMBER
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3651

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/569,169		HAME ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kavel P. Singh		3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 27 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/27/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara U.S. Patent No. 3,658,166 in view of Fargo U.S. Patent No. 6,997,302.

Claim 1, Hara teaches a passenger conveyor drive assembly having at least one drive member (16) each drive member that follows a path around a plurality of wheels (7) determining whether selected wheels (7) rotate at the same speed (Fig. 1) (P1 L68-69), but does not teaches as Fargo teaches a monitoring device to provide an indication of relative rotation between wheels (C2 3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a monitoring device as taught by Fargo into the invention of Hara to prevent any injury to the passengers.

Claim 2, Hara does not teach a brake assembly to rotate wheels (7) at different speed, but Fargo teaches a method of activating a brake responsive to determining that the wheels (50,52) rotate at a different speed (C4 L29-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a brake activating system as taught by Fargo into the invention of Hara for additional control of the system.

Claim 3, Hara teaches a drive member (16) associated with a deflection wheel (7), but Fargo teaches at least two drive members (32) each associated with a deflection wheel

Art Unit: 3651

(44) and the method includes determining whether the deflection wheels (34) rotate at the same speed (Fig. 2A) (C2 L45-48). It would have been obvious to one of ordinary skill in the art at the time of the invention to dual drive members as taught by Fargo into the invention of Hara to allow the conveyor to run smoothly.

Claims 4,5, and 6, Hara teaches the member (6) is associated with a drive wheel (18) and a deflection wheel (5) and the method includes determining whether the deflection wheel (5) rotates at the same speed as the drive wheel (18) (C2 L5-10).

Claims 7,8, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara U.S. Patent No. 3,658,166 in view of Bower U.S. Patent No. 4,765,456.

Claims 7,8, and 20, Hara teaches a plurality of drive wheels (7); a corresponding plurality of deflection wheels (6); a drive member (16) associated with each drive wheel (7), each drive member following a path around the associated drive wheel (7) and at least one corresponding deflection wheel (6), but does not teach as Bower teaches a monitor device (23) associated with selected ones of the wheels (2,3) that provides an indication of relative rotation between the selected wheels (2,3) (C2 L61-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a monitor system to track the speed of the rollers as taught by Bower into the invention of Hara to allow the conveyor to run smoothly.

Claim 15, Hara teaches the selected wheels are two deflection wheels (6) and wherein one of the selected deflection wheels (6) rotates with the first rotating member (5) and the second rotating member (13) rotates with the other selected deflection wheel (6) (C2 L45-48).

Art Unit: 3651

Claims 16 and 17, Hara teaches the selected wheels are a drive wheel (18) and a deflection wheel (6) and wherein the first rotating member (5) rotates at the same speed as the drive wheel and the second rotating member (13) rotates at the same speed as the selected deflection wheel (6) (P1 L68-69).

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara U.S. Patent No. 3,658,166 in view of Bower U.S. Patent No. 4,765,456 further in view of Reinsma U.S. Patent 3,854,345.

Claims 9,10, and 21, Hara teaches the first and second rotating members (5,6), but does not teach as Reinsma teaches bushings (22) having engaging faces (12) that cooperate to cause axial movement of at least one of the bushings responsive to relative rotation between the bushings (C2 L55-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a monitor system to use bushings to engage faces during movement as taught by Reinsma into the invention of Hara to reduce the amount of noise produced from the system.

Claims 11 and 22, Hara teaches one of the rotating members (5,6) is axially fixed and the other rotating member (5,6) is biased into a first axial position and wherein relative rotation between the rotating members (5,6) causes the other rotating member (5,6) to move axially against the bias (C2 L70-75).

Claims 12 and 23, Hara teaches rotating members, does not teach as Reinsma teaches a spring (30) that biases the other rotating member (14) into the first axial position (C3 L47-50). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a monitor system to use springs to align the rotating members during

Art Unit: 3651

movement as taught by Reinsma into the invention of Hara to maintain the alignment and reduce wear.

Claims 13,14,18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara U.S. Patent No. 3,658,166 in view of Bower U.S. Patent No. 4,765,456 further in view of Fargo U.S. Patent 6,997,302.

Claim 13, Hara teaches a passenger conveyor system, where Bower teaches a monitor system, but neither teach as Fargo teaches brake actuator associated with at least one of the rotating members, the actuator being operative responsive to axial movement of at least one of the rotating members (44) (C4 L3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a brake activating system as taught by Fargo into the invention of Hara for additional control of the system.

Claim 14, Hara does not teach as Fargo teaches the brake actuator (32) includes a follower (72) that follows axial movement of the at least one rotating member (34) and wherein movement of the follower triggers the brake actuator (32) (C5 L10-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to control system brake activating system as taught by Fargo into the invention of Hara for additional control of the system.

Claims 18 and 19, Hara teaches the selected wheels are deflection wheels (6), but does not associate with a separate drive member (32) as Fargo teaches (Fig. 2A) (C2 L45-48). It would have been obvious to one of ordinary skill in the art at the time of the invention to dual drive members as taught by Fargo into the invention of Hara to allow the conveyor to run smoothly.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Kavel P. Singh whose telephone number is (571) 272-2362. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KPS

  
GENE Q. CRAWFORD  
SUPERVISORY PATENT EXAMINER